

Notice of Allowability

Application No.

10/808,774

Examiner

Jean M. Corrielus

Applicant(s)

OHEDA, TAKASHI

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on July 12, 2006.
2. ☒ The allowed claim(s) is/are 1, 2, 5 and 8-12 renumbered as 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


JEAN M. CORRIELUS
PRIMARY EXAMINER

DETAILED ACTION

1. This office action is in response to the amendment filed on July 11, 2006, in which claims 1, 2 and 5-12 are presenting for further examination.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with George B. F. Yee (Reg. No.37, 478) on September 28, 2006.

The application has been amended as follows:

Please cancel claims 6 and 7 without prejudice.

5. (Amended): In a computer system comprising a first server and a second server, interconnected by a network to a disk storage subsystem, a method for replicating comprising:

allocating resources to perform a copy within a disk storage subsystem, said disk storage subsystem comprising a first database and a second database different from said first database, said first database associated with a first server, said second database associated with a second server, wherein said first database is of a first format and said second database is of a second format; and

replicating content from said first database to said second database; wherein said replicating is performed using said resources in said disk subsystem substantially independently

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of sending said content over said network, wherein said replicating content from said first database to said second database in said disk subsystem comprising:

replicating said content from said first database to an intermediate database, said intermediate database disposed on a shared volume of both said first format and said second format; and

replicating said content from said intermediate database to said second database, wherein said computer system further comprises a third server; receiving at said third server at least one of a plurality of requested specifications relating to replication;

determining a data transfer capacity according to said specifications;
determining at least one of a plurality of data transfer capacity settings according to said data transfer capacity;

notifying said disk subsystem of said data transfer capacity settings; and
allocating resources in said disk subsystem for data transfer based on said data transfer capacity settings.

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8. (Currently amended): In a computer system comprising a first server and a second server, interconnected by a network to a disk storage subsystem, a computer program product comprising:

code for allocating resources to perform a copy within a disk storage subsystem, said disk storage subsystem comprising a first database and a second database different from said first database, said first database associated with a first server, said second database associated with a second server, wherein said first database is of a first format and said second database is of a second format;

code for replicating content from said first database to said second database,; wherein said replicating is performed using said resources in said disk subsystem ~~substantially~~ independently of sending said content over said network, wherein said replicating content from said first database to said second database in said disk subsystem comprising:

replicating said content from said first database to an intermediate database, said intermediate database disposed on a shared volume of both said first format and said second format; and

replicating said content form said intermediate database to said second database, wherein said computer system further comprises a third server;

code for receiving at said third server at least one of a plurality of requested specifications

relating to replication;

code for determining a data transfer capacity according to said specifications;

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code for determining at least one of a plurality of data transfer capacity settings according to said data transfer capacity;

code for notifying said disk subsystem of said data transfer capacity settings;

code for allocating resources in said disk subsystem for data transfer based on said data transfer capacity settings; and

a computer readable storage medium for holding the code.

9. (Currently amended): A disk storage subsystem, said disk storage subsystem operable in a computer system comprising a plurality of computers, said plurality of computers interconnected to said disk storage subsystem by at least one of a plurality of information channels, wherein said disk storage subsystem copies content from a first database to a second database different from said first database using resources in said disk subsystem ~~substantially~~ independently of sending said content over said information channels; and wherein said disk storage subsystem copies said content in accordance with a resource allocation received from one of said plurality of computers, said resource allocation based upon at least one of a plurality of data transfer capacity settings determined by said one of said plurality of computers in accordance with a data transfer capacity and at least one of a plurality of received specifications.

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10. (Currently amended): A disk storage subsystem operable in a computer system comprising a first server and a second server, interconnected by a network to said disk storage subsystem, wherein said disk storage subsystem replicates content of a first database associated with said first server to a second database associated with said second server, said first database and said second database disposed in said disk storage subsystem, said first database being different from said second database, wherein said disk storage subsystem allocates resources to perform content replication within said disk storage subsystem; and said disk storage subsystem replicates content from said first database to said second database; wherein said replicating is performed substantially independently of sending said content over said network.

3. Claims 1, 2, 5 and 8-12 are allowable in light of the applicant's arguments and in light of the prior art made of record.

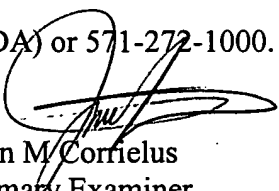
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jean M. Corrielus
Primary Examiner
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September 29, 2006